UNITED STATES DEPARTMENT OF COMMERCE

# COMMERCIAL STANDARD

## No. 1

# NEW BILLET-STEEL CONCRETE REINFORCEMENT BARS

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON
1927

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# NEW BILLET-STEEL CONCRETE REINFORCEMENT BARS

ACCEPTED BY

Associations and Individuals
Listed on Page 1 of this Report

ISSUED BY THE BUREAU OF STANDARDS

Effective Date, January 1, 1928

PRICE 5 CENTS

Sold only by the Superintendent of Documents, U. S. Government Printing Office
Washington, D. C.

UNITED STATES
GOVERNMENT PRINTING OFFICE
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## TO THE READER

The purpose of this Commercial Standard is to assist in securing for manufacturers, distributors, and consumers those economies, savings, and benefits which will result from concentration of producing and selling effort on goods made in accordance with this standard.

It has been demonstrated in many instances that concentration on fewer varieties of a specific product permits their manufacture by mass-production methods and also substantial reduction of the inventories usually regarded as necessary for good service to the trade. It has likewise been demonstrated that these and other economies operate to reduce unit cost and therefore selling price. This sharing of savings with the purchaser in turn helps to increase sales, and thus volume of output.

However, the uniformity and constancy of quality in products made in accordance with widely recognized and accepted commercial standards may prove to be of even greater importance than price as a factor in increased sales. Hence, this Commercial Standard should be regarded as a minimum specification, and subject to revision upward to advance quality as scientific investigation and research, also improvement in process, method, and machinery of manufacture, demonstrate it to be possible and practicable. In other words, it is expected that concentration on fewer varieties will help to make them better in quality; that is, to increase their performance, durability, and general fitness for the purposes for which they are designed.

Definite provision is made herein for the revision of this Commercial Standard at stated intervals and to recognize at such times whatever improvement of quality has occurred in the interim. Thus, the acceptor of this standard is assured that the standard will keep pace with current practice, and that it will not prevent, but instead will encourage, continuous refinement and improvement of the goods to which this standard applies.

Your acceptance of, support for, and adherence to this standard will strengthen its usefulness and value, and obviously such action on your part assures you of a share in the economies and benefits inherent in this waste-elimination program.

# COMMERCIAL STANDARD No. 1

## NEW BILLET-STEEL CONCRETE REINFORCEMENT BARS

### ACCEPTED BY

ASSOCIATIONS

American Electric Railway Association, New York, N. Y.
American Institute of Architects, New York, N. Y.
Associated Factory Mutual Fire Insurance Companies, Boston, Mass.
Associated General Contractors of America, Washington, D. C.
Concrete Reinforcing Steel Institute, Chicago, Ill.
National Association of Builders Exchanges, Washington, D. C.
National Builders Supply Association of the United States, Cleveland, Ohio.
National Hardware Association of the United States, Philadelphia, Pa.

DISTRIBUTORS AND USERS

Alamo Iron Works, San Antonio, Tex.
Alamo Steel & Supply Co., Houston, Tex.
Albany Steel & Iron Supply Co. (Inc.), Albany, N. Y.
American Hard Wall Plaster Co., Utica, N. Y.
American System of Reinforcing, Chicago, Ill.
Arkansas Foundry Co., Little Rock, Ark.
Asheville Supply & Foundry Co., Asheville, N. C.
Austin Bros., Dallas, Tex.
Baird Hardware Co., Gainesville, Fla.
Baker, Hugh J., & Co., Indianapolis, Ind.
Barrett, Thomas L., Co., Louisville, Ky.
Barton Spider Web System (Inc.), Chicago, Ill.
Benedict, John, Co., Davenport, Iowa.
Brewer & Co. (Inc.), Miami, Fla.
Bridge, Otto, Co., Sioux City, Iowa.
Builders' Material Co., Cedar Rapids, Iowa.
Builders Supply Co., Sioux Falls, S. Dak.
Building Products Co., Toledo, Ohio.
Capitol Steel Corporation, Lansing, Mich.
Capitol Steel & Iron Co., Oklahoma City, Okla.
Carlem Engineering Co., Pittsburgh, Pa.
Carnine, James H., & Co., Indianapolis, Ind.
Cement Products Co., Davenport, Iowa.
Central Clay Products Co., Wilkes-Barre, Pa.
Central Railroad Co. of N. J., Jersey City, N. J.
City Coal & Material Co., West Jackson, Miss.
Clark Building Material Co., Jackson, Miss.
Clinton Bridge Works, Clinton, Iowa.
Colorado Builders Supply Co., Denver, Colo.
Columbus Builders Supply Co., Columbus, Ohio.
Concrete Engineering Co., Omaha, Nebr.
Concrete Steel Co., New York, N. Y.
Concrete Steel Fireproofing Co., Detroit, Mich.
Cowin & Co. (Ltd.), Winnipeg, Manitoba, Canada.
Cowin & Co. (Inc.), Minneapolis, Minn.
Davis Bros. (Inc.), Philadelphia, Pa

Dean, Olney J., & Co., Chicago, Ill.
Department of Purchase, City of New York, N. Y.
Des Moines Steel Co., Des Moines, Iowa.
Dietrich Bros., Baltimore, Md.
Dudley Bar Co., Birmingham, Ala.
Electric Welding Co., Pittsburgh, Pa.
Fargo Foundry Co., Fargo, N. Dak.
Fireproof Products Co. (Inc.), New York, N. Y.
Fireproofing Appliances Co., Louisville, Ky.
Gabriel Steel Co., Detroit, Mich.
Gunn, Carle & Co., San Francisco, Calif.
Harris, Albert L. (municipal architect), Washington, D. C.
Hassenstein, Carl, Co., Sioux Falls, S. Dak.
Holliday, W. J., & Co., Indianapolis, Ind.
Hustad Co., Minneapolis, Minn.
Igoe Bros., Newark, N. J.
Jobbers Sales Corporation (Inc.), New Orleans, La.
Kalman Steel Co., Chicago, Ill.
Klein, J. B., Iron & Foundry Co., Oklahoma City, Okla.
Kyle & Co., Fresno, Calif.
Lann & Carter Hardware Co., Aberdeen, Miss.
Lombard Iron Works & Supply Co., Augusta, Ga.
McClintic-Marshall Construction Co., Philadelphia, Pa.
McCracker-Ripley Co., Portland, Oreg.
McKinney, James, & Sons, Albany, N. Y.
Mamer Co., The, Benton Harbor, Mich.
Maryland Steel Products Co., Baltimore, Md.
Massart, Henry (consulting engineer), Baltimore, Md.
Meriwether Supply Co., Shreveport, La.
Mersick, C. S., & Co., New Haven, Conn.
Metzger-Richardson Co., Pittsburgh, Pa.
Midwest Steel Co., Oklahoma City, Okla.
Monongahela Supply Co., Morgantown, W. Va.
Morgan, J. J., Co., Columbus, Ohio.
Morman, S. A., & Co., Grand Rapids, Mich.
Mosher Steel & Machinery Co., Dallas, Tex.
Mueller Lumber Co., Davenport, Iowa.
Northern Supply & Fuel Co., Superior, Wis.
North Texas Iron & Steel Co., Fort Worth, Tex.
Olsen, Ole K., New Orleans, La.
Paterson-Leitch Co., Cleveland, Ohio.
Patterson Steel Co., Tulsa, Okla.
Peden Iron & Steel Co., Houston, Tex.
Pennsylvania Railroad, Philadelphia, Pa.
Perry Lime & Cement Co., Monroe, La.
Pidgeon-Thomas Iron Co., Memphis, Tenn.
Piedmont Iron Works, Spartanburg, S. C.
Pittsburgh Des Moines Steel Co., Des Moines, Iowa.
Quimby, Henry H. (designing and consulting engineer), Philadelphia, Pa.
Republic Structural Iron Works Division, Cleveland, Ohio.
Rosslyn Steel & Cement Co., Washington, D. C.
Ryerson, Joseph T., & Son (Inc.), Chicago, Ill.
Schilling, I. E., Co., Miami, Fla.
Shand Engineering & Sales Co., Columbia, S. C.
Smith & Caffrey Co., Syracuse, N. Y.
Southern Engineering Co., Charlotte, N. C.
Southern, G. F., Co., Atlanta, Ga.
Southern States Steel Co., Dallas, Tex.
Southern Steel Products Co., Richmond, Va.
Standard Salt & Cement Co., Duluth, Minn.
Steel Service Co., San Francisco, Calif.
Sternberg, S., & Co., Asheville, N. C.
Taylor, A., Co., Philadelphia, Pa.
Tidewater Structural Materials Corporation, New York, N. Y.
Truscon Steel Co., Youngstown, Ohio.
Virginia Steel Co. (Inc.), Richmond, Va.

Vulcan Manufacturing Co., Fond du Lac, Wis.
Weiller, James J., & Sons, Huntington, W. Va.
Wetenhall, W. S., Co., San Francisco, Calif.
Widmayer Steel (Inc.), Washington, D. C.
Wilson, Weesner, Wilkinson Co., Nashville, Tenn.
Woods, Beder, Sons, Moline, Ill.

MANUFACTURERS

Atlantic Steel Co., Atlanta, Ga.
Colorado Fuel & Iron Co., Denver, Colo.
Columbia Steel Co., San Francisco, Calif.
Knoxville Iron Co., Knoxville, Tenn.
Rockaway Rolling Mill, The, Rockaway, N. J.
Texas Steel Co., Fort Worth, Tex.
Wisconsin Steel Co., Chicago, Ill.
Youngstown Sheet & Tube Co., Youngstown, Ohio.

GOVERNMENT

Department of Agriculture, United States Bureau of Public Roads, Washington, D. C.
Navy Department, Washington, D. C.
Treasury Department, Washington, D. C.
United States Shipping Board Merchant Fleet Corporation, Washington, D. C.
War Department, Washington, D. C.

# COMMERCIAL STANDARD No. 1

## NEW BILLET-STEEL CONCRETE REINFORCEMENT BARS

In accordance with the action on March 19, 1927, of the general conference of representatives of manufacturers, distributers, and users of new billet stock for concrete reinforcement hereinafter named, the United States Department of Commerce, through the Bureau of Standards, recommends that the current intermediate grade of new billet stock for concrete reinforcement, as specified in the American Society for Testing Materials Standard Specifications for Billet-Steel Reinforcement Bars (Serial Designation; A15–14), be considered as standard for new billet bars.

NOTE.—The specifications for billet-steel concrete reinforcement bars (A15–14) and for rail-steel concrete reinforcement bars (A16–14) may be obtained from the American Society for Testing Materials, 1315 Spruce Street, Philadelphia, Pa. An excerpt from the former specification (A15–14) covering the intermediate grade is appended hereto.

This recommendation is to be effective January 1, 1928, for new production and March 1, 1928, for the clearing of spot stocks.

Promulgation recommended.

R. M. HUDSON,
*Assistant Director, Commercial Standards.*

Promulgated.

GEORGE K. BURGESS,
*Director, Bureau of Standards.*

APPROVED, November 1, 1927.

HERBERT HOOVER,
*Secretary of Commerce.*

## HISTORICAL

In view of the savings which had been effected in the concrete reinforcing steel industry by the simplified practice recommendation covering sizes of bars, it was felt that a simplification of the grades of new billet steel from which these bars are made would add greatly to these savings and benefit all concerned. Such a recommendation would facilitate the handling and warehousing of the bars and at the same time release capital invested in grades which are seldom specified.

This movement would in no way affect that class of bars which are rerolled from rails, but would apply solely to new billet steel. The use of rerolled rails for concrete reinforcing is in itself a very commendable step in the elimination of waste and should continue as current practice wherever the specifications for material call for properties that are inherent in this type of bar.

These considerations prompted the industry to request the Department of Commerce, through the National Committee on Metals Utilization, to call together a general conference of all interests to discuss a recommendation, the adoption of which would replace with one or two the existing three grades of new billet steel for concrete reinforcing.

## FIRST GENERAL CONFERENCE

[January 26, 1926]

A representative of the Concrete Reinforcing Steel Institute presented to the meeting the views of the distributors in the matter of stocking three grades of new billet steel. He stated that at least 100,000 tons of steel were being carried in stock, and that reducing the number of grades would permit a substantial cut in the stock supply. A recent survey showed that the 100,000 tons referred to was divided as follows: 35 per cent structural grade, 55 per cent intermediate grade, and 10 per cent hard grade. He pointed out some of the obvious benefits which would accrue from fewer varieties, such as the release of a large amount of capital and the insurance of better deliveries.

In the discussion which followed this address the representatives of the technical societies expressed the conviction that such a matter as this, affecting qualities of materials specified, should logically be decided by the engineers and users who purchase the bars. They

also felt that any steps which might be contemplated with regard to the drafting of a new specification or the revision of existing ones should be referred to some specification-making body which had the proper organization to handle such work.

The mill representatives who were present stated that a reduction in the number of grades would not reduce their costs, but they were willing to go along on any reasonable recommendation which would better conditions in the entire industry. The conference decided that a survey of existing conditions conducted by a committee of the industry would bring to light definite facts upon which could be based a recommendation. The National Committee on Metals Utilization was empowered to appoint such a committee to make the survey and to report back to a similar conference at the end of a year. The following committee was appointed:

A. E. Lindau, chairman, American System of Reinforcing.
O. W. Irwin, Truscon Steel Co.
C. Louis Meyer, Concrete Engineering Co.
C. F. W. Rys, Carnegie Steel Co.
E. F. Kennedy, Bethlehem Steel Co.
D. H. Sawyer, Associated General Contractors of America.
LeRoy Kern, American Institute of Architects.
O. L. Grover, American Association of State Highway Officials.
J. J. Yates, Central Railroad of New Jersey.

## SURVEY OF CONDITIONS IN THE FIELD

The committee appointed at the general conference, acting in cooperation with the National Committee on Metals Utilization, conducted a survey of current practice in the industry. From the results obtained it was evident that the architects, engineers, contractors, technical experts, users of these bars, and others were in favor of reducing the present three grades to one as a means of insuring economy, speedier delivery, and the elimination of error in obtaining the proper grade.

While the mills rolling bars from new billet steel believed that the adoption of a single grade would not reduce their costs, they were willing to cooperate with the rest of the industry in any reasonable movement leading to the elimination of waste. It is the desire of the mills to supply the user with the grade of bar that he wants. Consequently, if the user decides on one grade of new billet steel the mill will supply it.

The distributors of steel bars for concrete reinforcing, through the Concrete Reinforcing Steel Institute, unanimously favored the adoption of a single grade of new billet-steel reinforcement bars. The distributors favored the retention of the intermediate grade, which, according to their sales records, meets the majority of the demand.

## SECOND GENERAL CONFERENCE

[March 19, 1927]

The Committee on Grading of Steel for Concrete Reinforcement submitted its report to this meeting for discussion. It was the sense of the meeting that a single grade of billet stock reinforcing steel was desirable and that this grade should be the current intermediate grade, as covered in the American Society for Testing Materials' specification.

It was further decided that the American Society for Testing Materials should be officially informed of the action taken and be requested to consider the desirability of furthering the movement by a suitable revision of its existing specification. The representative of the American Society for Testing Materials who attended the conference explained the position of the society, and stated that because its specifications represent the most used standards in the country it can not eliminate grades which are required by the trade. However, should the trade in general believe that a single grade would meet all requirements, and specify its orders accordingly, the American Society for Testing Materials would most certainly cooperate.

The conferees were of the opinion that the selection of one grade as standard would go a long way toward reducing cost for the ultimate consumer, and that conditions in the industry generally would be bettered through wide adherence to the recommendation.

The standing committee was appointed to hold annual meetings for the purpose of considering all comments and suggested changes in the existing standard with a view to keeping the recommendation in accord with the wishes of the majority of those concerned.

The personnel of this committee is as follows:

A. E. Lindau, chairman, American System of Reinforcing.
O. W. Irwin, Truscon Steel Co.
C. Louis Meyer, Concrete Engineering Co.
H. H. Quimby, American Society for Testing Materials.
Charles F. Stone, Atlantic Steel Co.
D. H. Sawyer, Associated General Contractors of America.
Le Roy Kern, American Institute of Architects.
O. L. Grover, American Association of State Highway Officials.
J. J. Yates, Central Railroad of New Jersey.

## RESULTS

The work of the conference resulted in the adoption of one grade of new billet stock for concrete reinforcement to take the place of three. It is hoped that this program will meet the same favorable reception that was accorded the simplified practice recommendations on sizes of steel reinforcing bars and on steel spiral rods for concrete reinforcement.

January 1, 1928, was selected as the effective date of this recommendation for new production, and the limit date for clearing of spot stocks is March 1, 1928. It should be borne in mind that this recommendation in no way affects those contracts which have been agreed to prior to the above effective dates.

## PERSONNEL OF CONFERENCE ON BILLET-STEEL REINFORCEMENT BARS

[Held at Department of Commerce]

| Name | Representing |
|---|---|
| Bailey, P. R. | Rosslyn Steel & Cement Co. |
| Becker, Luther | Iron and Steel Division. |
| Beeman, M. A. | Concrete Reinforcing Steel Institute. |
| Bell, Joseph A. | Capital Steel & Iron Co. |
| Berry, Leslie | Southern Engineering Co. |
| Blaum, William L. | New York State Department of Public Works. |
| Brewer, George R. | Brewer & Co. (Inc.). |
| Burt, H. J. | Consulting engineer. |
| Christen, L. H. | Virginia Steel Co. |
| Curley, J. F. | Concrete Steel Co. |
| Dale, G. E. | Do. |
| Duffies, E. L. | Do. |
| Gillette, H. W. | Bureau of Standards. |
| Glenn, John F. | Kalman Steel Co. |
| Grover, O. L. | United States Bureau of Public Roads; State Highway Officials Association. |
| Hagberg, B. L. | Kalman Steel Co. |
| Healy, Ralph F. | Igoe Bros. |
| Howard, T. W. | United States Chamber of Commerce. |
| Johnson, Richard W. | Concrete Reinforcing Steel Institute. |
| Kern, L. E. | American Institute of Architects. |
| Knapp, H. F. | Carnegie Steel Co. |
| Knowlton, D. B. | Dudley Bar Co. |
| Lamm, L. M. | Iron Trade Review. |
| Langdon, E. W. | Joseph T. Ryerson & Son (Inc.). |
| Lyons, T. R. | Concrete Steel Co. |
| Lindau, A. E. | American System Reinforcing. |
| Meyer, C. Louis | Concrete Engineering Co. |
| Moffett, L. W. | The Iron Age. |
| Powell, Pardee | Inland Steel Co. |
| Pouch, W. H. | Concrete Steel Co. |
| Quinn, Maurice J. | Concrete Steel Fireproofing Co. |
| Boddy, Norman L. | Dietrich Bros. |
| Rose, J. B. | War Department. |
| Routh, Jr., George E. | Kalman Steel Co. |
| Rys, C. F. W. | American Society for Testing Materials. |
| Sawyer, D. H. | Associated General Contractors of America. |
| Scott, Jr., W. W. | Laclede Steel Co. |
| Shannon, M. C. | Gulf States Steel Co. |

| | |
|---|---|
| Shuman, Jesse J. | Jones & Laughlin Steel Corporation. |
| Skinner, A. E. | American Engineering Standards Committee. |
| Stacy, H. A. | Metals Committee Federal Specifications Board. |
| Stone, Charles F. | Atlantic Steel Co. |
| Thompson, George N. | Building Code Committee. |
| Tuke, H. A. | Truscon Steel Co. |
| Van Benschoten, H. W. | Knoxville Iron Co. |
| Youry, F. W. | Truscon Steel Co. |

National Committee on Metals Utilizations:

W. Chattin Wetherill.
E. W. Ely.
Joseph S. Crews.
P. H. H. Dunn.

## APPENDIX

[Excerpt from American Society for Testing Materials Specification A15–14 for Billet-Steel Concrete Reinforcement Bars covering the intermediate grade]

1. These specifications cover three classes of billet-steel concrete reinforcement bars; namely, plain, deformed, and cold twisted.

2. * * *.

### I. MANUFACTURE

3. (*a*) The steel shall be made by either or both the following processes: Bessemer or open-hearth.

(*b*) The bars shall be rolled from new billets. No rerolled material will be accepted. * * *

4. * * *.

### II. CHEMICAL PROPERTIES AND TESTS

5. The steel shall conform to the following requirements as to chemical composition:

| | | |
|---|---|---|
| Phosphorus | Bessemer | not over 0.10 per cent. |
| | Open-hearth | not over 0.05 per cent. |

6. An analysis of each melt of steel shall be made by the manufacturer to determine the percentages of carbon, manganese, phosphorus, and sulphur. This analysis shall be made from a test ingot taken during the pouring of the melt. The chemical composition thus determined shall be reported to the purchaser or his representative and shall conform to the requirements specified in section 5.

7. Analyses may be made by the purchaser from finished bars representing each melt of open-hearth steel and each melt, or lot of 10 tons, of Bessemer steel. The phosphorus content thus determined shall not exceed that specified in section 5 by more than 25 per cent.

## III. PHYSICAL PROPERTIES AND TESTS

8. (*a*) The bars shall conform to the following requirements as to tensile properties:

*Tensile properties*

| Properties considered | Intermediate grade | |
|---|---|---|
| | Plain bars | Deformed bars |
| Tensile strength ..... pounds per square inch | 70,000–85,000 | 70,000–85,000 |
| Yield point, minimum ..... do | 40,000 | 40,000 |
| Elongation in 8 inches, ..... minimum per cent | [1] 1,360,000 | [1] 1,125,000 |

[1] See sec. 9.

(*b*) The yield point shall be determined by the drop of the beam of the testing machine.

9. (*a*) For plain and deformed bars over ¾ inch in thickness or diameter, a deduction from the percentages of elongation specified in section 8 (*a*) of 0.25 per cent shall be made for each increase of $\frac{1}{32}$ inch of the specified thickness or diameter above ¾ inch.

(*b*) For plain and deformed bars under $\frac{7}{16}$ inch in thickness or diameter a deduction from the percentages of elongation specified in section 8 (*a*) of 0.5 per cent shall be made for each decrease of $\frac{1}{32}$ inch of the specified thickness or diameter below $\frac{7}{16}$ inch.

10. The test specimen shall bend cold around a pin without cracking on the outside of the bent portion, as follows:

*Bend-test requirements*

| Thickness or diameter of bar | Intermediate grade | |
|---|---|---|
| | Plain bars | Deformed bars |
| Under ¾ inch | 180° $d=2t$ | 180° $d=3t$ |
| ¾ inch or over | 90° $d=2t$ | 90° $d=3t$ |

EXPLANATORY NOTE.—$d$ = the diameter of pin about which the specimen is bent, $t$ = the thickness or diameter of the specimen.

11. (*a*) Tension and bend test specimens for plain and deformed bars shall be taken from the finished bars and shall be of the full thickness or diameter of bars as rolled, except that the specimens for deformed bars may be machined for a length of at least 9 inches if deemed necessary by the manufacturer to obtain uniform cross section.

* * * * * * *

12. (*a*) One tension and one bend test shall be made from each melt of open-hearth steel and from each melt, or lot of 10 tons, of Bessemer steel, except that if material from one melt differs ⅜ inch or more in thickness or diameter one tension and one bend test shall be made from both the thickest and the thinnest material rolled.

(*b*) If any test specimen shows defective machining or develops flaws, it may be discarded and another specimen substituted.

(*c*) If the percentage of elongation of any tension test specimen is less than that specified in section 8 (*a*) and any part of the fracture is outside the middle third of the gauge length, as indicated by scribe scratches marked on the specimen before testing, a retest shall be allowed.

## IV. PERMISSIBLE VARIATIONS IN WEIGHT

13. The weight of any lot of bars shall not vary more than 5 per cent from the theoretical weight of that lot.

## V. FINISH

14. The finished bars shall be free from injurious defects and shall have a workmanlike finish.

## VI. INSPECTION AND REJECTION

15. The inspector representing the purchaser shall have free entry, at all times while work on the contract of the purchaser is being performed, to all parts of the manufacturer's works which concern the manufacture of the bars ordered. The manufacturer shall afford the inspector, free of cost, all reasonable facilities to satisfy him that the bars are being furnished in accordance with these specifications. All tests (except check analyses) and inspection shall be made at the place of manufacture prior to shipment, unless otherwise specified, and shall be so conducted as not to interfere unnecessarily with the operation of the works.

16. (*a*) Unless otherwise specified, any rejection based on tests made in accordance with section 7 shall be reported within five working days from the receipt of samples.

(*b*) Bars which show injurious defects subsequent to their acceptance at the manufacturer's works will be rejected, and the manufacturer shall be notified.

17. Samples tested in accordance with section 7, which represent rejected bars, shall be preserved for two weeks from the date of the test report. In case of dissatisfaction with the results of the tests, the manufacturer may make claim for a rehearing within that time.

(Cut on this line)

NOTE.—You are urged to detach this sheet and mail it to the Secretary of Commerce as an evidence of your intention to cooperate in the national effort to eliminate waste.

## ACCEPTANCE OF COMMERCIAL STANDARD

Date----------

The SECRETARY OF COMMERCE,
*Washington, D. C.*

SIR: We, the undersigned, hereby accept the commercial standard for new billet-steel concrete reinforcement bars, as our standard of practice beginning----------
(Date)
in the production,[1] distribution,[1] and consumption [1] of that commodity.

We will use our best effort to secure the general adoption of the standard.

Signed----------

Title----------

Company [2]----------

Street address [2]----------

City and State [2]----------

---

[1] Please designate by drawing lines through those which do not apply.

[2] Kindly typewrite or print.



O